REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-9 and 12-15 remain active in the application subsequent to entry of this Amendment.

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention. More specifically, the subject matter of claim 2 has been incorporated into claim 1 and, in turn, the subject matter of both claims 10 and 11 have been incorporated into claim 2. As a consequence, claims 10 and 11 have been canceled as redundant. By virtue of these amendments the only rejection which involves claims 2, 10 and 11 is the one of alleged anticipation based on the Pekala et al published U.S. citation. However, for completeness the two citations on which the anticipation rejections are based are discussed in the remarks that follow.

To anticipate a claim, a single reference must disclose the claimed invention with sufficient clarity to prove its existence in the prior art. *Motorola Inc. v. Interdigital Technology Corp.*, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997). Anticipation rejections are only proper when the "claimed subject matter is identically disclosed or described in 'the prior art,' without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 172 USPQ 524, 526 (CCPA 1972); *see also Akzo N.V. v. International Trade Commission,* 1 USPQ 2d 1241, 1246 (Fed. Cir. 1986). Absence from the reference of any claimed element negates anticipation *Kloster Speedsteel AB v. Crucible Inc.* 23 USPQ 160 (Fed. Cir. 1986).

Thus, applicants' claims are patentable over each of the cited references since they each fail to disclose each element of applicants' claims.

Nakamizo et al JP 2001-176482 (applied to original claims 1, 9, 12 & 14-15)

The examiner states that "Nakamizo teaches a separator for a lithium ion secondary battery, comprising: a polyolefin porous base material (paragraph 10); and a vinylidene fluoride resin porous layer; wherein the vinylidene fluoride layer is provided on one surface of the porous base material".

However, Nakamizo does not disclose or even suggest a weight-average molecular weight of vinylidene fluoride resin nor the amount of vinylidene fluoride resin in the porous layer.

Therefore, Nakamizo lacks the feature "the porous layer contains at least one vinylidene fluoride resin having a weight-average molecular weight of 150,000 to 500,000 in an amount of 50% by weight or more based on the overall vinylidene fluoride resin". claimed in the amended claim 1 of the present invention. Accordingly, the invention according to claim 1 is novel and claim 1 should be allowed.

Pekala et al U.S. 2002/0142214 (applied to original claims 1-3 and 9-15)

The examiner states that "[t]he limitation with respect to the vinylidene fluoride having a molecular weight of 150,000 to 500,000, is considered an inherent property of the resin set forth in the prior art, because Pekala teaches the same vinylidene fluoride employed by Applicant" and "A chemical composition and its properties are inseparable ... if the prior art teaches the identical chemical structure, the properties applicant disclose and/or claims are necessarily present".

Applicants disagree with the examiner's position. It is well know that polymers having the same structural units and composition may have different properties if the molecular weight or percentage of a particular polymer contained in the polymer different.

Therefore, the particular properties, which the applicant discloses and/or claims, are not taught by Pekala, because Pekala does not disclose the molecular weight and the percentage of the specific polymer claimed in claim 1.

Accordingly, Pekala lacks the feature of "the porous layer contains at least one vinylidene fluoride resin having a weight-average molecular weight of 150,000 to 500,000 in an amount of 50% by weight or more based on the overall vinylidene fluoride resin" in amended claim 1.

The advantageous effects of this feature of the present invention are shown in Tables 2 and 3 in the present specification. The separator of Examples 1 to 6, in which the porous layer thereof contains at least one vinylidene fluoride resin having a weight-average molecular weight of 150,000 to 500,000 in an amount of 50% by weight or more based on the overall vinylidene fluoride resin, maintained shutdown properties of the polyethylene drawn porous film and exhibited high adhesion to electrodes and, therefore, they are excellent in shutdown properties with a higher insulating reliability (Table 2). In addition, Table 3 reveals that the secondary batteries of the Examples 1 to 6 have sufficient performance for use as secondary batteries.

In contrast, Reference Examples 1 to 3 and Comparative Example 1, in which the porous layer does not contain at least one vinylidene fluoride resin having a weight-average molecular weight of 150,000 to 500,000 in an amount of 50% by weight or more based on the overall vinylidene fluoride resin, exhibited weight reduction (Table 3). This means that the vinylidene fluoride resin used in Reference Examples 1 to 3 and Comparative Example 1 are dissolved slightly by corrosion with the electrolytic solution. Also, the reason for the weight reduction in Comparative Example 2 is considered to be as follows. The electrolytic solution oozes out because of poor retention properties of the electrolytic solution with which the separator is impregnated. As is apparent from the results shown in Table 2 and Table 3, the separators of Examples 1 to 6 reconcile satisfactory physical properties and electrochemical characteristics.

The results presented in the original specification accompanied by the executed declaration signed by the inventors have significant evidentiary weight, comparable to the weight given to an executed declaration. It is well established by the Federal Circuit that "the examiner must consider comparative data presented in the specification which is intended to illustrate the claimed invention in reaching a conclusion in regard to the obviousness of claims." *In re Margolis,* 785 F.2d 1029, 228 U.S.P.Q. 1123, 1129 (Fed. Cir. 1993).

Therefore, the positive effects due to the feature of "the porous layer contains at least one vinylidene fluoride resin having a weight-average molecular weight of 150,000 to 500,000 in an amount of 50% by weight or more based on the overall vinylidene fluoride resin" claimed in amended claim 1 are not anticipated by Pekala, because Pekala does not disclose the molecular weight and the percentage of the specific polymer claimed in claim 1.

Accordingly, the invention according to claim 1 is novel and claim 1 should be allowed.

For the reasons explained above, claim 1 is believed to be patentable over the applied documents. In addition, claims 2-9 and 12-15 are also patentable by virtue of their dependency, either directly or indirectly, from amended claim 1.

Reconsideration and favorable action are solicited. If the examiner requires further information, please contact the undersigned by telephone.

Respectfully submitted,

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